

Claims

1. A power injector system for use with a magnetic resonance imaging system installed at least in part within an electromagnetic interference shielded room electrically accessible via a penetration panel, the power injector system comprising:

5 a power head adapted for operation within the shielded room to controllably inject a compound into a patient;

a power supply for operation outside the shielded room to receive utility electrical power; and

10 a power connection configured to couple electrical power through the penetration panel between the power supply outside of the shielded room and the power head for actuating the power head.

2. The power injector of claim 1, further comprising a power control adapted for operation within the shielded room interposed between the power supply and the power head, the power control operable to selectively actuate the power head with power received via the power connection from the power supply.

3. A method of converting a battery-powered magnetic resonance (MR) injector system in a shielded magnet room to remotely powered MR injector system, the method comprising:

placing a power supply outside of the shielded magnet room, the

power supply coupled to an AC outlet for electrical power;

replacing a pair of shielded electrical cables having conductors

adapted for data signals with a pair of shielded electrical

cables having conductors adapted for electrical power

transmission and having conductors adapted for data

signals, wherein one cable positioned outside the mag-

room couples the power supply to a penetration panel

and the other cable positioned inside the magnet ring.

couples to the penetration panel to be in electrical

communication with the first cable; and

modifying a power control in a shielded magnet room to

electrically couple power transmission conductors of the

shielded cables to terminals of a battery receptacle in

power control.

4. The method of claim 3, further comprising:  
in the power supply, relaying data signals from a console in the  
control room to the data conductors of the electrical  
cable outside of the shielded magnet room via a datalink  
in the power supply.
  
5. The method of claim 3, further comprising:  
in the power supply, coupling AC electrical power from an AC outlet to an AC  
outlet externally mounted on the power supply for powering the console.

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